

P02SF
11.3.14.1 v9

Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Common Name	Z-SEAL	Code	61302
Supplier	Coastal Chemical Co., L.L.C. 3520 Veterans Memorial Drive Abbeville, LA 70510 337-893-3862	MSDS#	Not available.
Synonym	Not available.	Validation Date	5/15/2003
Trade name	Not available.	Print Date	5/15/2003
Material Uses	Industrial applications: Coolant and antifreeze.	Responsible Name	Charles Touns
Manufacturer	Coastal Chemical Co., L.L.C. 3520 Veterans Memorial Drive Abbeville, LA 70510 337-893-3862	In Case of Emergency	Transportation Emergency Call CHEMTREC 800-424-9300 Other Information Call Charles Touns 337-261-0796

Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits
1) Ethylene Glycol	107-21-1	95	ACGIH (United States). CEIL: 100 mg/m ³

Section 3. Hazards Identification

Physical State and Appearance	Liquid.
Emergency Overview	WARNING! HARMFUL IF INHALED. HARMFUL IF SWALLOWED. MAY CAUSE EYE IRRITATION. Repeated or prolonged exposure to the substance can produce kidney damage. Do not ingest. Avoid exposure during pregnancy. Wash thoroughly after handling.
Routes of Entry	Ingestion.
Potential Acute Health Effects	<i>Eyes</i> Slightly hazardous in case of eye contact (irritant). <i>Skin</i> Slightly hazardous in case of skin contact (irritant, sensitizer, permeator). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. <i>Inhalation</i> Slightly hazardous in case of inhalation. <i>Ingestion</i> Very hazardous in case of ingestion.
Potential Chronic Health Effects	CARCINOGENIC EFFECTS: Classified A4 (Not classifiable for human or animal.) by ACGIH [1,2-Ethanedio]. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available.
Medical Conditions Aggravated by Overexposure:	Repeated or prolonged exposure is not known to aggravate medical condition.
Overexposure /Signs/Symptoms	Not available.
See Toxicological Information (section 11)	



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Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Get medical attention if irritation occurs.
Skin Contact	Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
Notes to Physician	Not available.

Section 5. Fire Fighting Measures

Flammability of the Product	May be combustible at high temperature.
Auto-ignition Temperature	The lowest known value is 398°C (748.4°F) (1,2-Ethanediol).
Flash Points	The lowest known value is CLOSED CUP: 116°C (240.8°F). OPEN CUP: 111°C (231.8°F). (Cleveland). (1,2-Ethanediol)
Flammable Limits	The greatest known range is LOWER: 3.2% UPPER: 15.3% (1,2-Ethanediol)
Products of Combustion	These products are carbon oxides (CO, CO ₂).
Fire Hazards in Presence of Various Substances	Slightly flammable to flammable in presence of open flames, sparks and static discharge, of heat.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
Protective Clothing (Fire)	Be sure to use an approved/certified respirator or equivalent.
Special Remarks on Fire Hazards	When heated to decomposition it emits acrid smoke and irritating fumes.
Special Remarks on Explosion Hazards	Not available.

Section 6. Accidental Release Measures

Small Spill and Leak	Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.
Large Spill and Leak	Absorb with an inert material and put the spilled material in an appropriate waste disposal.

Section 7. Handling and Storage

Handling	Do not ingest. Wash thoroughly after handling.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8. Exposure Controls/Personal Protection

Engineering Controls Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection

Eyes Safety glasses.

Body Lab coat.

Respiratory Wear appropriate respirator when ventilation is inadequate.

Hands Impervious gloves.

Feet Not applicable.

Personal Protection in Case of a Large Spill Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Product Name**Exposure Limits**

1) 1,2-Ethanediol

ACGIH (United States).
CEIL: 100 mg/m³

Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid.	Odor	Not available.
Molecular Weight	Not applicable.	Taste	Not available.
Molecular Formula	Not applicable.	Color	Blue
pH (1% Soln/Water)	Neutral.		
Boiling/Condensation Point	The lowest known value is 198°C (388.4°F) (1,2-Ethanediol).		
Melting/Freezing Point	May start to solidify at -13.5°C (7.7°F) based on data for: 1,2-Ethanediol.		
Critical Temperature	Not available.		
Specific Gravity	The only known value is 1.1135 (Water = 1) (1,2-Ethanediol).		
Vapor Pressure	The highest known value is 0.007 kPa (0.05 mmHg) (at 20°C) (1,2-Ethanediol).		
Vapor Density	The highest known value is 2.14 (Air = 1) (1,2-Ethanediol).		
Volatility	Not available.		
Odor Threshold	Not available.		
Evaporation Rate	Not available.		
VOC	Not available.		
Viscosity	Not available.		
LogK_{ow}	The product is much more soluble in water.		
Ionicity (in Water)	Not available.		
Dispersion Properties	See solubility in water, methanol, diethyl ether.		

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Solubility Easily soluble in cold water, hot water, methanol, diethyl ether.
Very slightly soluble in n-octanol.

Physical Chemical Comments Not available.

Section 10. Stability and Reactivity

Stability and Reactivity The product is stable.

Conditions of Instability Not available.

Incompatibility with Various Substances Reactive with oxidizing agents, alkalis.

Hazardous Decomposition Products Not available.

Hazardous Polymerization Not available.

Section 11. Toxicological Information

Toxicity to Animals Acute oral toxicity (LD50): 4947 mg/kg (Rat) (Calculated value for the mixture).
Acute dermal toxicity (LD50): 10032 mg/kg (Rabbit.) (Calculated value for the mixture).

Chronic Effects on Humans **CARCINOGENIC EFFECTS:** Classified A4 (Not classifiable for human or animal.) by ACGIH [1,2-Ethanediol].
DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Reproductive system/toxin/male [PROVEN] [1,2-Ethanediol].
Contains material which causes damage to the following organs: kidneys, the nervous system, the reproductive system, liver, upper respiratory tract, eyes.

Other Toxic Effects on Humans Very hazardous in case of ingestion.
Slightly hazardous in case of skin contact (irritant, sensitizer, permeator), of eye contact (irritant), of inhalation.

Special Remarks on Toxicity to Animals (Ethylene Glycol) Toxic for humans or animal life.

Special Remarks on Chronic Effects on Humans Not available.

Special Remarks on Other Toxic Effects on Humans (Ethylene Glycol) Exposure can cause nausea, headache and vomiting.

Section 12. Ecological Information

Ecotoxicity Not available.

BOD5 and COD Not available.

Biodegradable/OECD Not available.

Mobility Not available.

These products are carbon oxides (CO, CO2) and water.

Toxicity of the Products of Biodegradation The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation Not available.

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Section 13. Disposal Considerations

Waste Information	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Waste Stream	Not available.
Consult your local or regional authorities.	

Section 14. Transport Information

Shipping Description	9 <small>Drums - Not Regulated Bulk (> 535 gals.) - Regulated Environmentally hazardous substances, liquid, N.O.S., (Ethylene Glycol), 9, UN3082, III</small>
Reportable Quantity	5000.94 lbs. (2268 kg)
Marine Pollutant	Not available.
Special Provisions for Transport	Reportable Quantity 5000.94 lbs. (2268 kg)

Section 15. Regulatory Information

HCS Classification	Class: Target organ effects. Class: Reproductive toxins.
U.S. Federal Regulations	TSCA 8(b) inventory: 1,2-Ethanediol SARA 302/304/311/312 extremely hazardous substances: No products were found. SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: No products were found. SARA 311/312 MSDS distribution - chemical inventory - hazard identification: 1,2-Ethanediol: Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard SARA 313 toxic chemical notification and release reporting: 1,2-Ethanediol 95% Clean Water Act (CWA) 307: No products were found. Clean Water Act (CWA) 311: No products were found. Clean air act (CAA) 112 accidental release prevention: No products were found. Clean air act (CAA) 112 regulated flammable substances: No products were found. Clean air act (CAA) 112 regulated toxic substances: No products were found.
International Regulations	
EINECS	Not available.
DSCL (EEC)	R22- Harmful if swallowed.
International Lists	No products were found.
State Regulations	Pennsylvania RTK: 1,2-Ethanediol Florida: 1,2-Ethanediol Minnesota: 1,2-Ethanediol Massachusetts RTK: 1,2-Ethanediol California prop. 65: No products were found.

Section 16. Other Information

Label Requirements HARMFUL IF INHALED. HARMFUL IF SWALLOWED. MAY CAUSE EYE IRRITATION. Repeated or prolonged exposure to the substance can produce kidney damage.

**Hazardous Material
Information System
(U.S.A.)**

Health	*	2
Fire Hazard		1
Reactivity		0
Personal Protection		B

**National Fire
Protection Association
(U.S.A.)**



References Not available.

**Other Special
Considerations** Not available.

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Information System
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